**Application No.:** 

Case No.: 55841US005

## Amendments to the Claims:

Please amend claims 16 and 18 as follows:

## Listing of Claims:

- 1. (Cancelled)
- 2. (Previously presented) The accelerated weathering device optical filter of claim 18 wherein the glass is cylindrical.
- 3. (Previously presented) The accelerated weathering device of claim 18 wherein the glass has a thickness of between 0.7mm and 10mm.
- 4. (Previously presented) The accelerated weathering device of claim 3 wherein the glass has a lead content of 30% by weight.
- 5. (Previously presented) The accelerated weathering device of claim 18 wherein the optical filter comprises an ultraviolet transmissive optical filter operably coupled to the lead glass optical filter.
- 6. (Previously presented) The accelerated weathering device of claim 5 wherein the ultraviolet transmissive optical filter is constructed from quartz glass.
- 7. (Previously presented) The accelerated weathering device of claim 5 wherein the ultraviolet transmissive optical filter includes an infrared absorbing coating.
- 8. (Previously presented) The accelerated weathering device of claim 5 including a plurality of ultraviolet transmissive optical filters.
- 9. (Previously presented) The accelerated weathering device of claim 8 including two ultraviolet transmissive optical filters.

Applicati n N .:

Case No.: 55841US005

10. (Previously presented) The accelerated weathering device of claim 9 wherein the lead glass optical filter is disposed between the ultraviolet transmissive optical filters.

- 11. (Previously presented) An accelerated weathering device suitable for testing product samples, the accelerated weathering device comprising:
- a weathering fixture adapted to hold the product sample; and
- an illuminator disposed approximate the weathering fixture, the illuminator adapted to provide illumination to the product sample; wherein the illuminator includes
  - a light source having spectral characteristics in at least the range of 200nm to 400nm; and

an optical filter disposed proximate the light source, the optical filter comprising:

- a lead glass free of visible light absorbing components and having a thickness selected such that illumination passed through the lead glass has
- a first ratio of a first total irradiance for wavelengths shorter than 290nm to
- a second total irradiance for wavelengths between 300nm to 400nm, wherein the first ratio is less than 2.0×10<sup>-6</sup>; and
- a second ratio of an irradiance at 310nm to the second total irradiance, wherein the second ratio is at least  $1.2 \times 10^{-3}$ .
- 12. (Previously presented) The accelerated weathering device of claim 11 wherein the thickness of the lead glass is selected to provide a cut-on wavelength for the illumination passed through the lead glass of between 290nm to 300nm.
- 13. (Previously presented) The accelerated weathering device of claim 11 wherein the illumination from the light source includes a spectral component of at least 290nm to 400nm.
- 14. (Previously presented) The accelerated weathering device of claim 11 wherein the illumination from the light source includes an irradiance of between 0.35 W/m<sup>2</sup> and 1.31 W/m<sup>2</sup> at 340nm.

Application No.:

Case No.: 55841US005

15. (Previously presented) An accelerated weathering device suitable for testing product samples, the accelerated weathering device comprising:

a weathering fixture adapted to hold the product sample; and

an illuminator disposed approximate the weathering fixture, the illuminator adapted to provide illumination to the product sample; wherein the illuminator includes

a light source having spectral characteristics in at least the range of 200nm to 400nm; and

an optical filter disposed proximate the light source the optical filter comprising:

a lead glass free of visible light absorbing components and having a thickness selected such that the filtered illumination has

a cut-on wavelength of between 290nm and 300nm; and

a ratio of an irradiance at 310nm to a total irradiance for wavelengths between 300nm and 400nm wherein the ratio is at least  $1.2 \times 10^{-3}$ .

- 16. (Currently amended) An accelerated weathering device suitable for testing product samples, the accelerated weathering device comprising:
- a weathering fixture adapted to hold the product sample; and

an illuminator disposed approximate the weathering fixture, the illuminator adapted to provide illumination to the product sample; wherein the illuminator includes

a light source having spectral characteristics in at least the range of 200nm to 400nm; and

an optical filter assembly for an accelerated weathering device, the accelerated weathering device having a light source providing illumination, the optical filter assembly comprising:

an ultraviolet transmissive optical filter;

a lead glass [[free of visible light absorbing components]] operably coupled to the ultraviolet transmissive optical filter, the lead glass having a thickness selected such that illumination passed through the optical filter assembly has

5

Anni	cation	No ·
וטטה	i-arion	INO

Case No.: 55841US005

a first ratio of a first total irradiance for wavelengths shorter than 290nm to a second total irradiance for wavelengths between 300nm to 400nm, wherein the first ratio is less than 2.0x10<sup>-6</sup>; and

FAX:

a second ratio of an irradiance at 310nm to the second total irradiance, wherein the second ratio is at least 1.2x10<sup>-3</sup>.

- 17. (Previously presented) The accelerated weathering device of claim 16 wherein the ultraviolet transmissive optical filter provides at least 60% transmission of light at 250 nm and at least 80% transmission of light at 300 nm.
- 18. (Currently amended) An accelerated weathering device suitable for testing product samples, the accelerated weathering device comprising:
  - a weathering fixture adapted to hold the product sample; and
- an illuminator disposed approximate the weathering fixture, the illuminator adapted to provide illumination to the product sample;

wherein the illuminator includes

a light source having spectral characteristics in at least the range of 200nm to 400nm; and

an optical filter disposed proximate the light source, the optical filter comprising a glass free of visible light absorbing components and having a lead content of between 0.5% and 50% by weight.

Respectfully submitted,

6-15-04

Carolyn A. Fischer, Reg. No.: 39,091 Telephone No.: (651) 575-3915

Office of Intellectual Property Counsel 3M Innovative Properties Company Pacsimile No.: 651-736-3833